

verifying, by the mobile network operator contacting the content provider, that the first service response value matches the second service response value; and

transmitting the content to the user by the mobile network operator when the first service response value matches the second service response value.

3. (Amended) The method recited in claim 1, wherein the second service response value is calculated by the mobile network operator based on the random number received from the user and a second secret key possessed by the mobile network operator and associated with the user.

4. (Amended) The method recited in claim 2, wherein the first secret key is contained in a subscriber identification module provided by the mobile network operator and contained in the mobile station in such a manner that the user and the mobile station may not discover the value of the secret key.

5. (Amended) The method recited in claim 3, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the mobile network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the mobile network operator.

9. (Amended) The method recited in claim 7, wherein the content is encrypted by the mobile network operator using a cipher key, calculated by an A8

algorithm module based on the random number and the second secret key, prior to transmitting the content to the user.

13. (Twice amended) A method of ordering, paying for and delivering goods and services, comprising:

ordering a content having a content ID by a user selected from a content provider;

transmitting a first service response value, a mobile network identifier, and a cipher key by the user to the content provider;

transmitting the first service response value, the mobile network identifier, and a random number to a mobile network operator by the content provider;

calculating a second service response value and a cipher key by a mobile network operator and determining if the first service response value matches the second service response value; and

transmitting the content to the user, when the first service response value matches second service response value, by the content provider.

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14. (Amended) The method recited in claim 13, wherein the first service response value is calculated by the user based on a random number supplied by the content provider and a first secret key contained in a subscriber identification module provided by the mobile network operator and contained in a mobile station.

16. (Amended) The method recited in claim 14, wherein the first secret key is not accessible directly by the user or the mobile station and the value of the

secret key may not be discovered by the user, but is identical to the second secret key and both the first secret key and the second secret key are assigned when the user subscribes for a telecommunication service provided by the mobile network operator.

20. (Amended) The method recited in claim 18, wherein the content is encrypted by the mobile network operator using the cipher key, calculated by an A8 algorithm module based on the random number and the second secret key, prior to transmitting the content to the user.

22. (Amended) The method recited in claim 13, wherein the user is billed by the mobile network operator for the content in a telephone bill.

23. (Amended) The method recited in claim 13, further comprising:
hashing, by the user, a price of the content, the random number and a seller ID to create a hashed number;
computing, by the user, the first service response value based on the secret key and the hashed random number;
transmitting, by the user, the first service response value to the content provider;
transmitting, by the content provider, the random number, the seller ID the price of the content and the first service response to the mobile network operator;
computing, by the mobile network operator, the second service response value based on the secret key, the price transmitted by the content provider and the random number;

verifying, by the mobile network operator that the first service response value matches the second service response value; and

billing the user, by the mobile network operator, the price when the first service response value matches the second service response value in a telephone bill.

25. (Amended) A method of ordering, paying for and delivering goods and services, comprising:

ordering a content from a mobile network operator, having a content ID selected by a user;

transmitting a first service response value calculated by the user to the mobile network operator;

calculating a second service response value and a cipher key by a mobile network operator and determining if the first service response value matches the second service response value;

transmitting the content ID, and a cipher key to the content provider; and

transmitting the content to the user by the content provider when requested by the user.

26. (Amended) The method recited in claim 25, wherein the first service response value is calculated by the user based on a random number supplied by the mobile network operator and a first secret key possessed by the user.

27. (Amended) The method recited in claim 25, wherein the second service response value is calculated by the mobile network operator based on the

random number and a second secret key possessed by the mobile network operator and associated with the user.

28. (Amended) The method recited in claim 26, wherein the first secret key is contained in a subscriber identification module provided by the mobile network operator and contained in the mobile station in such a manner that the user and the mobile station may not discover the value of the secret key.

29. (Amended) The method recited in claim 27, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the mobile network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the mobile network operator.

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33. (Amended) The method recited in claim 31, wherein the content is encrypted by the content provider using a cipher key, calculated by an A8 algorithm module based on the random number and the second secret key and supplied by the mobile network operator, prior to transmitting the content to the user.

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36. (Amended) The method recited in claim 25, wherein the user is billed by the mobile network operator for the content in a telephone bill.

37. (Amended) A method of ordering, paying for and delivering goods and services comprising:

ordering a content, having a content ID, by a user selected from a mobile network operator;

transmitting a first service response value calculated by the user to the mobile network operator;

calculating a second service response value and a cipher key by a mobile network operator and determining if the first service response value matches the second service response value; and

transmitting the content to the user by the mobile network operator when requested by the user.

38. (Amended) The method recited in claim 37, wherein the first service response value is calculated by the user based on a random number supplied by the mobile network operator and a first secret key possessed by the user.

39. (Amended) The method recited in claim 37, wherein the second service response value is calculated by the mobile network operator based on the random number and a second secret key possessed by the mobile network operator and associated with the user.

40. (Amended) The method recited in claim 38, wherein the first secret key is contained in a subscriber identification module provided by the mobile network operator and contained in the mobile station in such a manner that the user and the mobile station may not discover the value of the secret key.

41. (Amended) The method recited in claim 39, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the mobile network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the mobile network operator.

45. (Amended) The method recited in claim 43, wherein the content is encrypted by the mobile network operator using a cipher key, calculated by an A8 algorithm module based on the random number and the second secret key and supplied by the mobile network operator, prior to transmitting the content to the user.

46. (Amended) The method recited in claim 44, further comprising:
~~decrypting the content received by from the mobile network operator by the mobile station using an A8 algorithm module contained in the subscriber identification module of the mobile station to generate a cipher key based on the random number and the first secret key.~~

48. (Amended) The method recited in claim 37, wherein the user is billed by the mobile network operator for the content in a telephone bill.

49. (Amended) A method of ordering, paying for and delivering goods and services, comprising:

ordering and paying for a plurality of contents by a user selected from a content provider;

transmitting a plurality of first service response values calculated by the user to the content provider;

calculating a plurality of second service response values by a mobile network operator when the user requests the content from the mobile network operator;

verifying, by the mobile network operator contacting the content provider, that a one of the plurality of first service response values matches a one of the plurality of second service response values; and

transmitting a content of the plurality of contents to the user by the mobile network operator when the one of the plurality of first service response values matches the one of the plurality of second service response values.

51. (Amended) The method recited in claim 49, wherein the plurality of second service response values are calculated by the mobile network operator based on the plurality of random numbers received from the user and a second secret key possessed by the mobile network operator and associated with the user.

52. (Amended) The method recited in claim 50, wherein the first secret key is contained in a subscriber identification module provided by the mobile

network operator and contained in the mobile station in such a manner that the user and the mobile station may not discover the value of the secret key.

53. (Amended) The method recited in claim 51, wherein the second secret key is stored in an authentication center of a telecom infrastructure operated by the mobile network operator and the first secret key and the second secret key are identical and assigned when the user subscribes for a telecommunication service provided by the mobile network operator.

57. (Amended) The method recited in claim 55, wherein the content of the plurality of contents is encrypted by the mobile network operator using a cipher key, calculated by an A8 algorithm module based on a random number of the plurality of random numbers and the second secret key, prior to transmitting the content of the plurality of contents to the user.